In Re Patent Application of:

CLARKE ET AL.

Serial No. 10/787,515

Filing Date: FEBRUARY 26, 2004

REMARKS

The Examiner is thanked for the thorough examination of the present application. In view of the arguments presented in detail below, it is submitted that all of the claims are patentable.

I. The Claimed Invention

The present invention is directed to a communications system. As recited in independent Claim 1, for example, the system includes a plurality of account databases each for storing information associated with different accounts, and a central database for storing location information associating each account with a respective account database. The system further includes at least one communications device for accessing account information and an interface device. In particular, the interface device is for receiving an account access request from the at least one communications device for a desired account. Moreover, the interface device is also for retrieving account location information from the central database for the desired account, and interfacing the at least one communications device with the respective account database associated with the desired account based thereon. Additionally, the interface device is also for caching the account location information and using the cached account location information for subsequently interfacing the at least one communications device with the respective account database.

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Independent Claim 9 is directed to a similar interface device. Furthermore, independent Claim 14 is directed to a related method, and independent Claim 17 is directed to a related computer-readable medium.

II. The Claims Are Patentable

A. Rejection of Claims 1-13 Under 35 U.S.C. §101

The Examiner rejected Claims 1-13 under 35 U.S.C. §101 contending that, although directed to a system, "all of the elements claimed could be reasonably interpreted in light of the disclosure by an ordinary artisan as being software alone, and thus is directed to software per se, which is non-statutory." Office Action, page 2.

Applicants respectfully disagree with the Examiner and submit that Claims 1-13 are directed to statutory subject matter. As an initial matter, the system of Claim 1 recites "at least one communications device for accessing account information." As discussed in paragraph 0026 of the originally filed specification, examples of such a communications devices include personal computers (PCs), PDAs, cell phones, etc. No one of ordinary skill in the art would consider such communications devices as being software alone.

Moreover, as discussed in paragraph 0029 of the specification, the claimed interface device may be implemented using a combination of hardware and software components. For

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example, it is noted that the interface device could be implemented in a server with various software modules using the processing and memory components of the server.

In addition, those of ordinary skill in the art would also appreciate that the claimed databases (i.e., the account databases and central database) also include hardware aspects and are appropriately presented in a system claim. As evidence, the Examiner need look no further that the primary Aravamudan et al. reference (U.S. Patent No. 6,154,749) cited in the office action, which in claim 1 thereof recites elements including "a central database" and a "plurality of spatially distributed local databases."

The rejection of Claims 1-13 under 35 U.S.C. §101 should therefore be withdrawn.

B. Rejection Under 35 U.S.C. §103(a)

The Examiner rejected independent Claims 1, 9, 14, and 17 based upon Aravamudan et al. in view of U.S. Patent Publication No. 2002/0116457 to Eshleman et al. Aravamudan et al. is directed to a caching scheme for databases that services spatially distributed customers in which a central database maintains all information to be stored. A plurality of local databases include copies of the information stored in the central database. For each data record in the central database, there is at most one copy of the data record in the set of local databases. The caching scheme includes a method for serving

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database requests in which a service request is made to a first local database located in the area from which the request originates. If the first local database fails to service the request, the central database services the request. After servicing the request, a second local database that may contain the data record is identified and the data record therein is destroyed. A new copy is written to the first local database. See, e.g., col. 1, lines 24-38 of Aravamudan et al.

The Examiner correctly acknowledges that Aravamudan et al. fails to teach or fairly suggest caching account location information and using the cached account location information for subsequently interfacing he at least one communications device with a respective account database, as recited in the above-noted independent claims. Nonetheless, the Examiner contends that Eshleman et al. provides this noted deficiency.

Eshleman et al. is directed to a system for transparently distributing DBMS resources across multiple platforms and multiple data servers, making them broadly accessible by dispersed users developers over networks such as the Internet. The system includes a centralized DBMS system and a Resource Abstraction Layer (RAL) added to a conventional database driver normally used to access a DBMS. The RAL implements DBMS resources that mirror the functionality of a centralized DBMS, but may be physically located at different networked locations. The RAL allows a plurality of remote server units (RSUs), implemented throughout the network, which receive and respond to

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data requests in place of the DBMS server. Each RSU maintains a database cache of recently accessed data from which incoming requests may be satisfied and can process database requests on behalf of the DBMS server. The DBMS server is contacted only if the RSU cannot respond to the request with cached data. In this case, the DBMS server processes the request as if it had been received directly from the application server. Once the DBMS server has retrieved the results of the request, it sends them back to the RSU. The RSU provides the results to the application server and stores the data in the database cache for use with future requests.

It is respectfully submitted that the Examiner mischaracterizes the teachings of the prior art, and that the proposed combination of references fails to teach or fairly suggest all of the recitations of the above-noted independent claims. As noted above, both the Aravamudan et al. and Eshleman et al. caching schemes both attempt to distribute or cache information in a plurality of different databases or caches for serving local users. If a given user request cannot be processed based upon the local database or cache, then these systems look to the full set of information stored in a central database (Aravamudan et al.) or central DBMS (Eshleman et al.). In other words, both of these systems attempt to limit direct hits on the central database in localized databases that can process some requests without involving the central database.

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In stark contrast, the above-noted independent claims recite retrieving account location information from a central database for a desired account, and interfacing a communications device making an account access request with a respective account database associated with the desired account based upon the account location information. That is, in contrast to the Aravamudan et al. and Eshleman et al. systems where user requests are initially connected to a locally assigned database and subsequently processed by a central database only if locally cached data is insufficient for local processing, in the abovenoted independent claims account access requests are received centrally at the interface device, and then assigned to the appropriate distributed account database.

Moreover, Eshleman et al. fails to teach or fairly suggest caching account location information for use in future requests. That is, the "account location information" recited in the above-noted independent claims associates each account with a respective account database from among the plurality of account databases. The information cached in the RSU in the Eshleman et al. system is simply the results of the prior request that the RSU was unable to handle and which instead was processed by the central DBMS. This is done so that a next similar request may potentially be processed locally without a need for accessing the DBMS again.

As such, this cached information is not account access information as recited in the above-noted independent claim to

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direct a user request to another appropriate database when the next request comes along. Rather, this data is cached so that the next request can be processed then and there without having to be routed to another database (i.e., the central DBMS). Thus, Eshleman et al. simply fails to teach or fairly suggest caching account location information and using the cached account location information for subsequently interfacing at least one communications device with a respective account database, as recited in the above-noted independent claims. To find otherwise would require the impermissible use of the claimed invention, in hindsight, as a roadmap or template to piece together the teachings of the prior art.

Accordingly, it is submitted that independent Claims 1, 9, 14, and 17 are patentable over the prior art. Their respective dependent claims, which recite yet further distinguishing features, are also patentable over the prior art and require no further discussion herein.

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CONCLUSION

In view of the amendments to the claims and the arguments provided herein, it is submitted that all the claims are patentable. Accordingly, a Notice of Allowance is requested in due course. Should any minor informalities need to be addressed, the Examiner is encouraged to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,

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